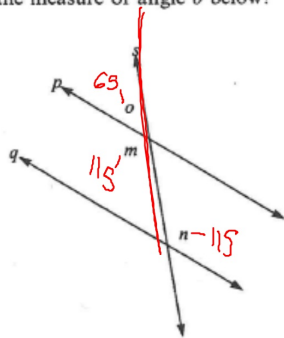
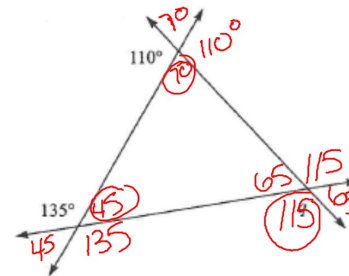


7. Given:  $p$  and  $q$  are parallel lines  
 $s$  is a transversal crossing lines  $p$  and  $q$   
 $o$ ,  $m$ , and  $n$  are angles  
 $m + n = 230^\circ$   
 What is the measure of angle  $o$  below?



- A.  $25^\circ$   
 B.  $65^\circ$   
 C.  $115^\circ$   
 D.  $130^\circ$   
 E.  $140^\circ$

10. In the figure below, where the triangle is created by 3 lines that intersect at the angles indicated, the measure of angle  $q$  = ?



- A.  $45^\circ$   
 B.  $65^\circ$   
 C.  $70^\circ$   
 D.  $110^\circ$   
 E.  $115^\circ$

EXTERIOR  $\angle$

12. For all real numbers  $x$  and  $y$ ,  $(x-3y)^2 = ?$

- A.  $2x - 6y$   
 B.  $x^2 - 6xy + 9y^2$   
 C.  $x^2 - 9y^2$   
 D.  $x^2 - 9x^2y^2 - 9y^2$   
 E.  $x^2 + 9xy + 9y^2$

$$(x - 3y)(x - 3y)$$

$$-3xy - 3xy$$

24. If  $\frac{3\sqrt{7}}{7} = \frac{3\sqrt{7}}{x\sqrt{7}}$  is true, then  $x = ?$

- A. 49  
 B. 21  
 C. 7  
 D.  $\sqrt{7}$   
 E. 1

Set denominators equal:

$$\frac{\sqrt{7}}{7} = \frac{7}{x\sqrt{7}}$$

$$\frac{7\sqrt{7}}{7} = x$$

Simplify second fraction then cross multiply

$$\frac{3\sqrt{7}}{7} = \frac{3}{x}$$

$$21 = 3x\sqrt{7}$$

$$7 = x\sqrt{7}$$